

THE GENESIS PROJECT AND THE EDISON DEVICE

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Our Mission

The Genesis Project was created to develop quickly a viable, abundant, low-cost and totally environmentally friendly source of energy capable of immediately eliminating the world's dependence on oil, gasoline, natural gas, coal and nuclear energy at minimal cost, minimal conversion effort and without requiring people, businesses or industries to change the way they use energy.

There were three primary objectives involved in accomplishing our mission.

- First, to develop the underlying technology necessary to form the basis of the new energy source.
- Second, to create turnkey energy generation devices that utilise the technology for easy and transparent replacement of traditional forms of energy.
- Third, to advance the designs and specifications of the devices to the point where worldwide mass production and deliveries could begin within months.

Our Message

We created the Genesis technology to allow the world to view energy from a different perspective, and to prove that each one of us has the gift and power to change the world and make it a better place.

Today is only the beginning of our journey. We have given the world the gift of total freedom from the bonds of energy dependence on fossil fuels. Oil, natural gas and coal are precious resources that we can never recreate or replenish. Many of the products we use and depend on in our everyday lives require chemicals derived from oil, natural gas and coal to exist. Once these natural resources are gone, life as we know it will be gone as well.

Energy has always been as plentiful and inexpensive as water. Amazingly, it was right there in front of us all this time; we just were not looking at it that way.

With blessings, Genesis World Energy

The Science Behind Genesis

The most abundant and practical source of pure hydrogen and oxygen on the planet is ordinary water. However, previously it had not been possible to break water down into its molecular state in practical terms from an energy consumption standpoint. The process consumed more energy than could be extracted from the resulting hydrogen and oxygen gases. As an example, 1,000 watts of energy would be consumed to break down water to its molecular state, and only 900 watts of usable gas energy would be yielded from the process.

Recently, two new processes have been developed that are capable of breaking down water at lower energy consumption rates; however, those processes have proven to be costly and impractical.

One requires the use of a very specialised chemical additive on a continuous basis that is in relatively short supply. Furthermore, the chemicals left over from the process must be disposed of without contaminating the environment.

The other process is only accomplishable in highly controlled, centrally located facilities. Therefore, it would involve establishing new hydrogen and oxygen gas distribution and transportation channels from scratch.

In order to make Genesis viable, the team needed to develop the ability to break down any type of water into its basic molecular state, using a small amount of space and consuming far less energy than could be realised as a result of the process. Major scientific and technological breakthroughs were required to accomplish this.

Since the objectives of the Genesis Project were very specific and unique, the team started entirely fresh, creating every aspect of the new technology from scratch. Therefore, the conventional thinking and the technological accomplishments of other scientists and engineers did not limit the team.

Extracting Hydrogen and Oxygen from Water: The gCell Process

In common terms, the essence of the Genesis technology involves a process that excites the hydrogen and oxygen molecules contained in water and detaches them with very little electrical energy—much the way magnets with opposing polarities push away from each other. This was accomplished by creating a series of molecular-level reactions within a specialised cell—the Genesis gCell—which in appearance looks similar to a fuel cell. Within this cell, three simultaneous processes occur.



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- The first process produces electrical voltage from water passing over special catalytic reactants. This electrical voltage aids in the excitement of the hydrogen and oxygen molecules in the water.

- The second process involves a thermo-electro-catalytic reaction that results in the complete separation of the hydrogen molecules from the oxygen molecules. This yields maximum efficiency in the extraction of ultra-pure hydrogen and oxygen gas.

- During the third process, small amounts of the hydrogen and oxygen gas molecules created in the second process reattach, providing additional electrical current to subsidise the overall gas generation process.

The result of this landmark technological breakthrough is that it allows hydrogen and oxygen gas to be created from ordinary water, using only a fraction of the total resulting energy. The amount of water used to generate hydrogen and oxygen gases from this process is negligible: usually only a few ounces of water a day, much of which is ultimately recovered within the process and reused.

A single Genesis gCell stack (about the size of a small car battery), consisting of several individual gCells, is capable of producing hundreds of cubic feet of gas per day. In comparison, a typical American home located in a cold climate consumes approximately five metered cubic feet of natural gas per day.

Creating Electricity from Hydrogen and Oxygen: The eCell Process

As was the case in creating the technology for extracting hydrogen and oxygen gases efficiently, the Genesis team elected to start completely from scratch in developing its own special fuel cells. While the Genesis electrical generating cells (eCells) are in fact "fuel cells", they share very little in common with any other type of fuel cell in existence.

Using the molecular technology developed for the Genesis gas-generating gCell provided significant advantages over existing fuel cell technologies. These advantages include a low manufacturing cost, substantially higher electrical generation yields and catalytic reactant formulations that are not subject to normal degradation, providing substantially longer service life.

Utilising a reverse reactant process (similar to but less complicated than the gCell gas-generation process), hydrogen and oxygen molecules are excited and attracted to each other (much like aligned magnets pulling themselves together) and water is then recreated as a result. Substantial amounts of electricity and heat are generated as a byproduct.

The Genesis technology is so efficient that a single compact eCell stack (about the size of a gCell stack) can produce over 1,000 amps of electrical current. The electricity extracted from the eCells then replaces the electricity provided by

utility companies. Water generated from the eCells is recovered and reintroduced into the gas generation system, while heat generated during the process is converted to usable energy.

The Genesis gas and electrical generation processes are so compact and efficient that devices based on the technology are easily capable of replacing traditional forms of energy, using very little space.

Bringing It All Together: The Edison Device

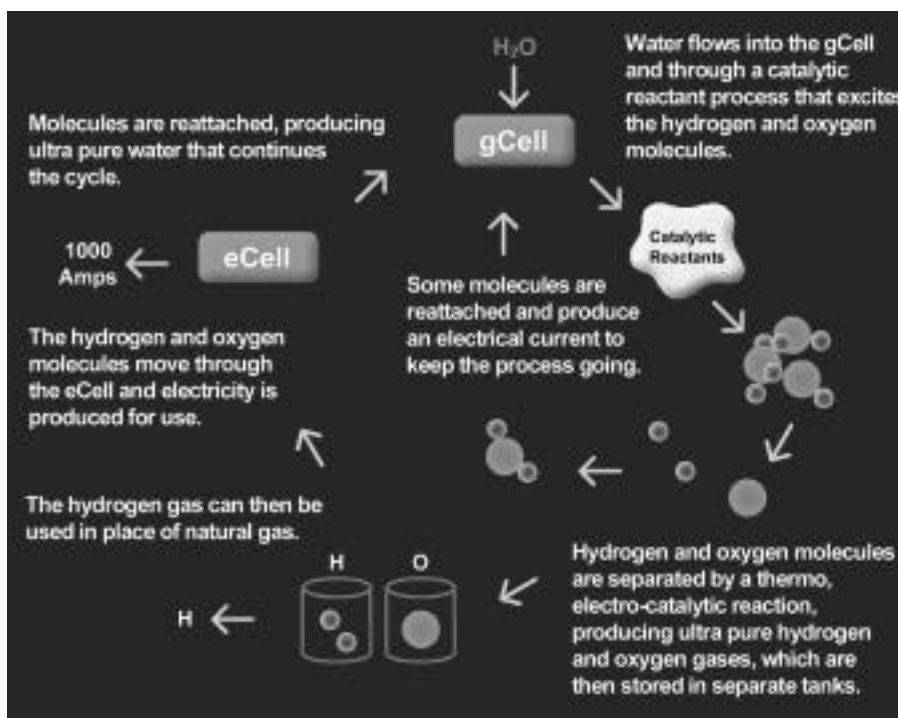
While the gCell and eCell technology is breathtaking in its simplicity, it needed to be incorporated into a mechanism that could viably meet residential and commercial energy requirements. This has been accomplished through the Edison Device: a self-contained energy generation system consisting of stacks of gCells and eCells. The Edison Device is roughly the size of a typical residential outdoor air conditioning unit.

Installing the electrical generation feature of the Edison Device to any home or business simply requires attaching three wires to existing electrical service connections, typically located in the electrical box that contains the utility company's power meter. Installing the gas-generation feature of the Edison Device simply requires connecting the device's gas feed line directly into the existing natural gas line on the customer's side of the utility company's gas meter. At that point, customers are fully independent from energy provided by utility companies. Appliances that use natural gas or propane are easily converted to use hydrogen gas by installing gas line flow restrictors; this can be accomplished simply and easily by any average do-it-yourselfer.

As a safety precaution, if a gas leak develops in a customer's appliance, the Edison Device has the ability to detect the leak and immediately shut off the gas supply until repairs can be performed. As a result, gas supplied by the Edison Device will be safer than using natural gas or propane.

Market-Ready Models

The Genesis Project has developed two market-ready models of the Edison Device: a residential version and a commercial version. The residential model is capable of producing up to 30 total kilowatts of combined gas and electrical power per day (a typical home uses



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between 5 and 6 kilowatts), and the commercial model can generate up to 100 total kilowatts of energy. For heavier commercial requirements, multiple Edison Devices can be linked together.

The design of the Edison Device has proven that less is more. The energy-generating portion of the device has no moving parts; in fact, the only "mechanical" aspects of the Edison Device are the small circulation pumps and micro-valves that control the flow of water and gases. As a result, maintenance is limited to the occasional replacement of inexpensive water filters, which can easily be accomplished by consumers themselves, while water usage is minimal over the device's projected 20+ years of service life!

Using only small amounts of water to meet residential and commercial energy requirements, producing no noise or emissions beyond the creation of ultra-pure water, and utilising an energy-generation technology that is self sustaining, the Edison Device is truly a "green machine".

The Genesis Team

Genesis World Energy is a technology development, production and supply consortium whose key members have spent much of their careers developing pivotal technologies for defence and space programs. Their contribution ranges from defending the world's nations from nuclear holocaust, to taking man to the Moon and exploring the depths of space.

In September 2000, a plan to create a new, practical source of energy out of the hydrogen and oxygen in water was put into motion. By early 2001, a team of over 400 visionaries from a wide spectrum of disciplines, including science, technology and engineering, was assembled to crack the scientific and technological breakthroughs necessary to make this technology possible. These dedicated men and women, who have very diverse ethnic, religious and political backgrounds, were able to set aside their differences for the common benefit of mankind. With a focused mission, they accomplished what no one else has: the ability to harness an unlimited source of energy from the molecular structure of water—an achievement that will change the face of energy as we know it.

But it isn't the recognition, fame or

fortune that motivated the Genesis team members to pursue this challenge. In fact, they desire to remain in the background, letting the technology receive the attention. Rather, it is their passion to make a positive difference in the world that compels them to provide the world's people with access to a low cost, abundant energy resource, to protect the Earth's natural resources from depletion and pollution, and to invest in future generations through the support of educational, environmental and charitable causes and the perpetual advancement of this technology.

Call it fate or divine inspiration, but the Genesis team knows that every aspect of this journey came together by design. From every team member and each successful milestone to the amazingly short development process, this scientific breakthrough is nothing short of a miracle.

The Genesis Project was privately funded to ensure that its goal remained outside the control of government or corporate interests.

Questions Answered

Q: How did the Genesis Project begin?

A: A 50-year-old research and development group, with past ties to Cold War technology programs, launched the Genesis Project in 2000. The Genesis Project was privately funded to ensure that its goal—the generation of clean, abundant and renewable energy from hydrogen and oxygen molecules in water—remained outside the control of government or corporate interests.

Q: Who is involved in the Genesis Project?

A: The project team was very large, consisting of more than 400 visionaries representing a wide array of scientific, technological and engineering disciplines. Working in task force groups throughout the US, team members themselves did not know the identities of

other Genesis Project members outside their own group or the totality of the project's goals. In order to retain their privacy and for reasons of confidentiality related to the protection of their intellectual property assets, the individuals involved in the Genesis Project wish to remain anonymous.

Q: Who owns Genesis technology?

A: The Genesis technology is privately owned by the individuals who created it, and they have no intention of offering equity to the public. People who wish to invest in Genesis-related technologies, may look to publicly trading corporations that receive licences.

Q: What is the reason for the secrecy surrounding the Genesis Project?

A: Because of the economic and geopolitical implications of the Genesis Project technology, every possible means of safeguarding it have been taken prior to its disclosure and the subsequent establishment of licensing agreements aimed at its proliferation. Because the technology may initially be perceived as a threat to established government and industry interests, strict security measures are being taken to keep the Genesis Project technology in the hands of free market forces.

Q: How is the Edison Device being commercialised?

A: Commercialisation of the Edison Device is the responsibility of two separate business entities. The first of these, Genesis World Energy, organised as a technology development, production and supply consortium, will further the underlying Genesis Project technology, and establish and manage a road map for future product enhancements. The responsibility for the proliferation of the Edison Device falls to World Energy Management, which acts as the exclusive licensing representative for the worldwide distribution.

Q: Are Edison Devices currently available?

A: Commercially viable versions of the Edison Device currently exist, as does the manufacturing capacity to produce and assemble devices. It is the intent, however, of the Genesis Project that full-scale assembly and distribution of the Edison Device be accomplished by licensees, rather than by Genesis World Energy or World Energy Management.

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Q: How will licences for the Edison Device be distributed?

A: World Energy Management will broadly issue licences for the Edison Device on a worldwide basis to both qualifying private industries and governments. Special consideration in licensing will be given, however, to those traditional energy producing and distribution companies who will be most affected by the Edison Device technology. In all cases, licensees will have the rights to assemble, distribute, sell and service Edison Devices, but will purchase the critical technology components from Genesis World Energy.

Q: How will consumers gain access to Edison Devices?

A: Based on the licensing objectives of World Energy Management, consumers will most likely gain access to Edison Devices either by purchasing them from licensed manufacturers and assuming responsibility for their installation and maintenance, or will rent them through entities such as local utility companies, who would in turn assume responsibility for installation and maintenance.

Q: Must homes and businesses be retrofitted to use the Edison Device?

A: Not at all! Installation of an Edison Device is as simple as connecting three wires, a gas line and a garden hose. The gas-generation portion of the Edison Device installs in the customer side of a residential gas line, with inexpensive gas flow restrictors required to convert appliances from natural gas to the hydrogen gas produced by the Edison Device. The electrical portion installs quickly into the existing power box. The water required for the device's process can literally come from any source, including salt water from the ocean, rainwater and recycled water or from a simple garden hose connection.

Q: What is the life expectancy of an Edison Device?

A: Because the Edison Device has virtually no moving parts, the only parts that need routine replacement are inexpensive water filters. The life expectancy of the Edison Device is 20 years or more. Although each customer's energy needs are different, average all-electric homes may use as little as 30 gallons of water over the device's expected 20-year life cycle.

Q: When can the individual consumer purchase the device?

A: Companies and governments have 60 days to apply and qualify to obtain licences. After that, all companies and governments selected for licences will receive product design and specification packages on exactly the same day, giving each licensee the incentive to begin delivery to consumers as quickly as possible in order to establish the best possible market share. In all cases, in order for licensees to retain their licence, they must begin regular delivery to consumers within nine months after receiving their licence.

Q: Who will install and service the devices?

A: Typically, the company that sells the Edison Device directly to the consumer will also provide installation and service. Do-it-yourselfers may also elect to install and service the devices themselves. Utility companies will most likely utilise their existing service personnel to install and service the devices that they supply to customers.

New Questions Answered
(as at December 17, 2002)

Q: Does the Genesis Project technology represent perpetual motion?

A: Absolutely not. The Genesis gCell technology is based on a chemical reaction that is triggered by exposing chemicals to water and small amounts of electrical voltage and current. All of the chemicals used in the process are contained on a specially coated membrane within the gCell and are consumed over time. Once the chemicals are depleted, the system will not continue to function.

Q: How much water does the Edison Device consume?

A: That depends entirely on the type and amount of energy used by individual consumers. An average all-electric home located in the United States could consume as little as 30 gallons of water over the Edison Device's approximately 20+ years of service life. A typical US home that uses both gas and electricity would consume about as much water as a refrigerator icemaker. A large gas-heated swimming pool, depending on the size and location, could consume several gallons of water a month.

Q: Why can no one find pending or completed patent applications related to the Genesis technology in the US or foreign patent offices?

A: Simply stated, the Genesis team has elected to protect its intellectual properties and/or proprietary trade secrets, utilising different and varied mechanisms rather than those afforded through the traditional patent process.

Q: Why are some within the scientific community sceptical of the Genesis technology?

A: For security purposes, the Genesis team has elected to disclose little about the science behind the technology. In the absence of detailed information, it is not possible to understand how Genesis's stated results were achieved. Therefore, the scientific community at large will analyse the Genesis Project based on conventional thinking. The Genesis technology works and is ready to go worldwide.

Q: When will the public get to see demonstrations of the Edison Device and the Genesis technology?

A: There have been numerous demonstrations of the technology to the public. In fact, the technology was demonstrated for invited members of the public and a film crew near Boise, Idaho, on November 27, 2002, a few days before the Boise press conference [December 5]. Demonstrations have also taken place on the East and West coasts of the United States. For security purposes, the dates, times and locations of demonstrations are always kept secret, and individuals attending the demonstrations must sign strict confidentiality agreements. Once licensees have been selected and licences awarded, each licensee will be free to demonstrate the technology for the public at will.

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Editor's Notes:

This article on the Genesis Project was downloaded and slightly edited from the Genesis World Energy website at <http://www.genesisworldenergy.org>.

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